

Claims

1. A device for forming a knot in a fishing line or the like in order to attach a fish hook or other item of fishing tackle thereto or to join the line to another line, comprising a support means with three fingers or other suitable nodes extending therefrom in spaced relationship, so that the middle or second finger or node is offset from a line joining the first and third fingers or nodes, each finger or node having means associated therewith which cooperate to allow the tying of a hangman's knot or uni-knot as defined herein, the first finger or node having means to retain and rotate the free end of the line after it has passed around the other two fingers or nodes so as to be able to twist the free end of the line about both a first primary portion of the line and a second return portion of the line to form the knot, the third finger or node allowing a loop to be formed in the primary line to create the said return portion, and the second finger or node allowing a loop to be formed in the line intermediate the return portion and the free end of the line, the second finger or node keeping said loop thus formed away from or clear of the twisting operation performed by the rotation means twisting the free end about the primary and return portions of line running between the first and third fingers or nodes.
2. A device according to claim 1, wherein the support means is in the form of a plate or wire member which is removably attachable to a suitable portion of a fishing rod, by means including clasp mounting, snap-on fitting, taping, wrapping, utilising Velcro™ fitting or tying.
3. A device according to claim 1, wherein the support means is in the form of a plate or wire member which is permanently attached to a suitable portion of a fishing rod, by means of gluing, riveting or fixing with screws.
4. A device according to claim 1, which is hand held.
5. A device according to any one of the preceding claims wherein each of the three fingers or nodes is integrally formed with the support means.
6. A device according to claim 5, in which the support means and fingers or nodes are formed from a continuous length of heavy gauge wire material bent to form the basic structure, namely the support means and respective fingers or nodes; the means associated with each finger for forming the knot being affixed to the respective fingers or nodes thus formed.

7. A device according to any one of the preceding claims, in which one or more of the three fingers or nodes has grooves or serrations along a portion thereof or is otherwise so shaped as to prevent slippage of the fishing line therefrom when the device is being used to form the knot.
- 5 8. A device according to any one of the preceding claims in which the first finger or node has means associated therewith to retain the fishing line whilst forming the knot, so that the line is kept under suitable tension as it is fed through or around the various fingers or nodes and/or the components found thereon.
9. A device according to any one of the preceding claims, in which the means to
10 rotate the free end of the line about the primary and return portions of the line is provided in the form of a rotatable spool arrangement having a central hollow core, the spool having a slot along the side thereof communicating with the hollow core to allow the primary and return portions of the line to be fed or threaded into the hollow core.
- 15 10. A device according to claim 9, in which the spool is located on and rotatable about a spindle arrangement, the spindle itself also having a corresponding hollow core and having a similar slot along its length, whereby in a first feeding position, the slots in the spool and spindle are brought into alignment and the primary and return portions of the fishing line are fed through both slots and thus
20 into the central core, so that the primary and return portions of the fishing line are retained in position, whilst the spool is twisted thereabouts, thereby causing the free end of the line to be wound the necessary number of turns about the primary and return portions of the line.
11. A device according to claim 9 or claim 10, wherein the outer profile of the spool
25 is serrated, textured or shaped to allow the user to run a finger along the outer edge thereof to turn it as required.
12. A device according to any one of claims 9 to 12, in which a raised section or flange, on the outer edge of the spindle mates with a notch in the spool so as to correctly aligning the twisting spool, in order that the line may be readily inserted
30 & released from the spool/spindle combination.
13. A device according to any one of claims 9 to 12 in which a lip or radially extending flange is located around the lower edge of the spindle, to hold the spool in place.

14. A device according to any one of claims 9 to 13, wherein the means to retain the free end of the line in or on the spool, is preferably provided for example in the form of a simple cut in the periphery thereof analogous to the cut provided in a reel of sewing thread, into which the line can be wedged, so that the free end of the line will be retained therein and be caused to wind about the primary and return portions of the line passing through the centre of the spool/spindle combination, when the spool is turned about its axis.
15. A device according to any one of the preceding claims, in which the third finger or node also has a hook threading means associated therewith for retaining a hook, especially the eye thereof, in position in order to allow for threading of the line therethrough.
16. A device according to claim 15 in which the third finger or node is provided with a threader in the form of a slot, comprising a funnel shaped entry point or countersunk holes communicating with a corresponding recess into which the eye of a hook is located, so that during a threading operation, the fishing line is pushed into the funnel shaped entry point and thereby caused to be threaded through the eye of the hook during the operation of forming the knot, whilst the slot itself has a suitable slit therein which allows removal of the line and hook once the knot is formed.
17. A device according to claim 16, in which one of the counter sunk holes in the threader contains curved shaped alignment grooves or notches that allow a hook to be held in place for threading.
18. A device according to any one of the preceding claims in which the device also incorporates a line cutter, located in a suitable safe position, whereby the line and especially the free end of the line, may be trimmed, once the knot is formed.
19. A device according to claim 18, wherein the cutter is mounted on the second finger or node or in that vicinity, within a recessed groove.
20. A device according to any one of the preceding claims, in which the device also incorporates not only means by which it can be attached to a single rod, but by suitable adaptation additional means so that it doubles as a device to retain sections of rod when disassembled.

21. A device according to any one of the preceding claims in which the finger or nodes are arranged symmetrically, whereby the device can function either in right-handed or left handed mode.
22. A method of forming a hangman's knot or uni-knot as defined herein, utilising a device according to any of the preceding claims, including the steps of :
- a) threading a fishing line through a retaining means associated with the first finger or node to maintain tension in the line whilst tying the knot,
 - b) feeding line through the hollow core of a spool and spindle combination mounted on the first finger or node of said device, then
 - c) passing the line through a threading means located in a third finger or node located below the first finger or node, a hook having been located therein, so that the line is threaded through the eye thereof, or simply around the outside of the third finger or node if threading is not required,
 - d) feeding the line back through the hollow core of the spool and spindle combination mounted on the first finger or node to form a return portion of the line, then
 - e) winding the free end of line about a second finger or node intermediate the first and third fingers or nodes, the second finger or node being offset from a line drawn between the first and third fingers or nodes to ensure that the loop thus formed is kept clear of the turning device and the primary and return portions of line extending between the first and third fingers or nodes,
 - f) attaching the free end of the line to the spindle by suitable attachment means,
 - g) causing the spindle to be rotated a sufficient number of turns (eg five or six turns) as required to form the knot, ie winding the free end of the line that many turns about the primary and return portions of the line, then
 - h) slipping the formed knot off the device and pulling on the respective portions of the line (ie the primary portion and the free end) to compact the knot, and then
 - i) sliding the knot towards the eye of the hook to complete the operation.